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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,172	11/17/2003	Patrick M. Jones	EMER 2627 (E-2422)	4100

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EXAMINER	
MULLINS, BURTON S	

ART UNIT	PAPER NUMBER
2834	

DATE MAILED: 04/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/715,172	JONES, PATRICK M.	
	Examiner	Art Unit	
	Burton S. Mullins	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 February 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *7-11 and 17-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *11 and 32* is/are allowed.

6)☒ Claim(s) *7-10,17-19 and 21-27* is/are rejected.

7)☒ Claim(s) *20 and 28-31* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

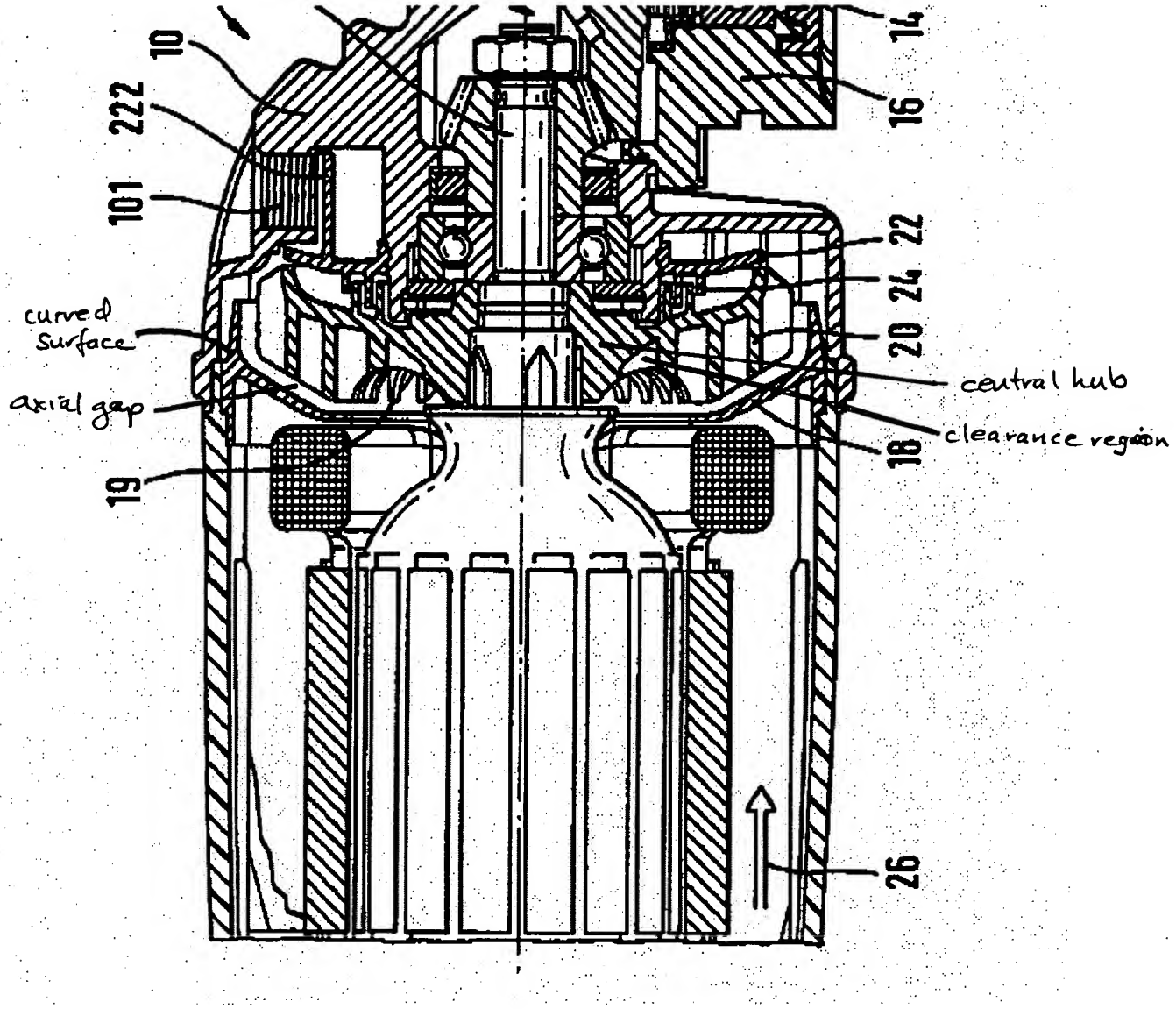
Claim Rejections - 35 USC § 112

1. Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Recitation "said portion of the fan" lacks antecedent basis.

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 7-10, 17-19 and 22-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Lamprecht et al. (GB 2,319,669). Lamprecht teaches a motor having a ventilation system which inhibits generation of noise (pp.1-2) comprising: a housing defined by a hollow casing (not numbered, Fig.1); a stator (not numbered, Fig.1) in the housing; a rotor (not numbered, Fig.1) and rotor shaft (not numbered, Fig.1) mounting the rotor for rotation in the housing; a fan 20 mounted on the rotor shaft to advance a flow of cooling air through the housing (represented by arrows 26, Figs.1&2; pp.4-5), the fan having plural blades 19 (Fig.2); and a baffle (air guide cap) 18 in the housing at a position generally between the stator and the fan 20 for directing flow 26 (Figs.1&2; p.2), the baffle including an annular section (not numbered, Fig.1) having a curved surface (not numbered, see marked Fig.1 below) extending axially above at least a portion of the fan (Fig.1 shows the inverted position of baffle 18 relative to fan 20), the blades 19 of the fan having a shape corresponding to the curved surface of the annular section of the baffle (Fig.1).



Regarding claim 8, the fan rotates in the direction indicated by arrow 21 in Fig.2. The blades 19 are inclined in the opposite direction.

Regarding claim 9, the baffle has an upstream side facing the stator (as evident from the arrow 26 indicating flow direction in Figs.1&2) and a downstream side facing the fan 20. The gap between the fan blades 19 and the baffle 18 is generally uniform, as evident from Fig.1.

Regarding claims 17-18, an annular section of the baffle 18 extends radially inward from the housing (Fig.1) and forms an axial gap between the annular section and the fan 20 of generally uniform size.

Regarding claim 19, the fan 20 rotates in the direction indicated by arrow 21 in Fig.2. The blades 19 are inclined in the opposite direction. Hence the fan is "a backward curved radial fan".

Regarding claim 21, the machine housing 10 has openings (not shown) radially outward from the fan 20 (p.4, last paragraph).

Regarding claims 22-23, an annular section of the baffle 18 extends radially inward from the housing (Fig.1) and forms an axial gap between the annular section and the fan 20 of generally uniform size.

Regarding claim 24, the fan 20 rotates in the direction indicated by arrow 21 in Fig.2. The blades 19 are inclined in the opposite direction. Hence the fan is "a backward curved radial fan".

Regarding claim 25, in addition to the elements of claim 7 taught by Lamprecht as described above, Lamprecht's fan 20 comprises a central hub (not numbered, Fig.1) with the blades 19 spaced therefrom to form a clearance region between the central hub and the blades (Fig.1).

Regarding claim 26, the axial gap between the curved portion of the baffle 20 and the fan 20 is of generally uniform size (Fig.1).

Regarding claim 27, the machine housing 10 has openings (not shown) radially outward from the fan 20 (p.4, last paragraph).

4. Claims 7-10, 17-19 and 22-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Stroetgen et al. (US 5,311,089). Stroetgen teaches a motor comprising: a housing 10 defined by a hollow casing (Fig.1); a stator 13 in the housing; a rotor 15 and rotor shaft 17 mounting the rotor for rotation in the housing; a fan 12 mounted on the rotor shaft to advance a flow of cooling air through the housing (represented by arrows 26, Fig.1; c.3, lines 19-20), the fan having plural blades 19 (Fig.2); and a baffle (cover ring) 20 in the housing at a position generally between the stator and the fan for directing flow (through vanes 23; Fig.1), the baffle including an annular section (generally indicated by numeral 20 in Fig.1) having a curved surface extending axially above at least a portion of the fan (Fig.1), the blades 19 of the fan having a shape corresponding to the curved surface of the annular section of the baffle (Fig.1).

Regarding claim 8, the fan rotates in the direction indicated by arrow 27 in Fig.2. The blades 19 are inclined in the opposite direction (c.2, lines 32-34).

Regarding claim 9, the baffle has an upstream side facing the stator (as evident from the arrow 26 indicating flow direction in Fig.1) and a downstream side facing the fan 12. The gap between the fan blades 19 and the baffle 20 is generally uniform, as evident from Fig.1.

Regarding claims 17-18, an annular section of the baffle 20 extends radially inward from the housing (Fig.1) and forms an axial gap between the annular section and the fan 12 of generally uniform size.

Regarding claim 19, the fan rotates in the direction indicated by arrow 27 in Fig.2. The blades 19 are inclined in the opposite direction (c.2, lines 32-34). Hence the fan is "a backward curved radial fan".

Regarding claim 21, the machine housing 10 has openings 21 radially outward from the fan 12 (Fig.1).

Regarding claims 22-23, an annular section of the baffle 20 extends radially inward from the housing (Fig.1) and forms an axial gap between the annular section and the fan 12 of generally uniform size.

Regarding claim 24, the fan rotates in the direction indicated by arrow 27 in Fig.2. The blades 19 are inclined in the opposite direction (c.2, lines 32-34). Hence the fan is "a backward curved radial fan".

Regarding claim 25, in addition to the elements of claim 7 taught by Stroetgen as described above, Stroetgen's fan 12 comprises a central hub (not numbered, Fig.1) with the blades 19 spaced therefrom to form a clearance region between the central hub and the blades (Fig.1).

Regarding claim 26, the axial gap between the curved portion of the baffle 20 and the fan 12 is of generally uniform size (Fig.1).

Regarding claim 27, the machine housing 10 has openings 21 radially outward from the fan 12 (Fig.1).

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over either Lamprecht et al. (GB 2,319,669) or Stroetgen et al. (US 5,311,089). Niether Lamprecht nor Stroetgen specifies the claimed gap size range between baffle and fan blades; however, this would have been an obvious modification because it is not disclosed that the claimed range produces new and unexpected results different in kind and not merely in degree from the results of the prior art and hence would have involved ordinary skill. In re Aller, 105 USPQ 233 (CCPA 1955).

Allowable Subject Matter

7. Claims 11 and 32 are allowed. The prior art, in particular Lamprecht or Stroetgen, does not teach the claimed motor and fan including, inter alia, a rim on the outer periphery of the baffle, the rim having at least one tab configured to be received in a corresponding hole in the casing to releasably secure the baffle in the casing (claim 11); or a lip with a curved convex surface surrounding the central opening of the baffle (claim 32).

8. Claims 20 and 28-31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art, in particular Lamprecht or Stroetgen, does not teach the claimed motor and fan including, inter alia, a rim on the outer periphery of the baffle, the rim having at least one tab configured to be received in a corresponding hole in the casing to releasably secure the baffle in the casing (claims 20 and 31). Regarding claim 28, the prior art,

in particular Lamprecht or Stroetgen, does not teach a lip with a curved convex surface defining the inner edge of the annular section of the baffle.

Response to Arguments

9. Applicant's arguments with respect to claims 7-10, 17-19, and 21-27 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Burton S. Mullins whose telephone number is 571-272-2029. The examiner can normally be reached on Monday-Friday, 9 am to 5 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Burton S. Mullins
Primary Examiner
Art Unit 2834

bsm
13 April 2006